



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,646	11/13/2003	Daniel F. Tell	CE10835R/10-187	8966
22917	7590	09/07/2005	EXAMINER	
MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196			LY, NGHI H	
			ART UNIT	PAPER NUMBER
			2686	

DATE MAILED: 09/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/712,646	TELL ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Nghi H. Ly	2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 28 April 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 22-26 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-21 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) 22-26 are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date. _____.   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/13/03</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of Group I (Claims 1-21) in the reply filed on 04/28/05 is acknowledged.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 5-10, 12-14 and 16-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Greaney et al (US 5,796,729).

Regarding claim 1, Greaney teaches a gateway (see fig.2, item 75) for controlling call routing via a selected network (column 11, lines 10-14, see "routing"), gateway comprising: the a controller configured to support and control the functionality of the gateway (see fig.2, and column 4, lines 19-29, see "LAN"), a wireless local area network (LAN) transceiver (see fig.2, and column 4, lines 19-29, see "LAN"), coupled to and cooperatively operable with the controller to form an association with a wireless communications unit, a local loop interface coupled to and cooperatively operable with the controller to support a connection with a local loop (column 1, lines 58-67, see "wireless local loop"), and a wide area network (WAN) transceiver (see fig.2, and

column 4, lines 19-29, see "WAN"), coupled to and cooperatively operable with the controller to support a wireless connection with a WAN and forward a message via the WAN corresponding to call routing (column 11, lines 10-14, see "routing") when the association with the wireless communications unit changes (see fig.2, and column 4, lines 19-29, see "WAN").

Regarding claim 2, Greaney further teaches the WAN transceiver and the controller operate: to send a registration message via a WAN session to the WAN (see fig.2, and column 4, lines 19-29, see "WAN"), the registration message effecting a call routing update so that calls to the wireless communications unit are routed to the local loop when the association is formed, and to receive an acknowledgement of the registration message via the WAN session (see column 8, lines 39-45).

Regarding claim 3, Greaney further teaches the controller operates to assign a LAN address to the wireless communications unit, responsive to the acknowledgment (see fig.2, and column 4, lines 19-29, see "LAN").

Regarding claim 5, Greaney further teaches cooperatively with the local loop interface operates to receive an incoming call indication via the local loop (see column 8, lines 41-51), cooperatively with the wireless LAN transceiver operates to forward the incoming call indication via a wireless LAN session (see fig.2, and column 4, lines 19-29, see "LAN") with the wireless communications unit and receive a response from the wireless communications unit (see fig.2, wireless connection between item 75 and portable terminal 52), and cooperatively with the local loop interface and the wireless LAN (see fig.2, and column 4, lines 19-29, see "LAN") transceiver answers an incoming

call corresponding to the incoming call indication on the local loop and couples the incoming call to the wireless communications unit via the wireless LAN session when the response is received (also see column 8, lines 41-51).

Regarding claim 6, Greaney further teaches the wireless LAN transceiver cooperatively with the controller receives a call request from the wireless communications unit via a wireless LAN session (see fig.2, and column 4, lines 19-29, see "LAN"), and when the local loop is available, the controller cooperatively with the local loop interface initiates a local loop call request to a public switched telephone network and receives one of a call ringing, a call answer, and a busy signal (also see column 8, lines 41-51).

Regarding claim 7, Greaney further teaches the controller together with the local loop interface monitors the local loop for a busy condition prior to initiating the local loop call request (see column 8, lines 41-51), and the controller cooperatively with the WAN transceiver sends a message via a WAN session indicating the local loop is busy upon initiating the local loop call request and a message indicating the local loop is idle when a call corresponding to the local loop call request has been completed (see fig.2, and column 4, lines 19-29, see "WAN").

Regarding claim 8, Greaney further teaches the controller together with the local loop interface monitors the local loop for a busy condition when the busy condition is detected, the controller cooperatively with the WAN transceiver initiates a WAN call request corresponding to the call request via the WAN (see fig.2, and column 4, lines 19-29, see "WAN") and responsive thereto receives, from the WAN, a status message

corresponding to one of call ringing, a busy signal, and a call answer (see column 8, lines 41-51 and column 10, lines 45-64), and the controller together with the wireless LAN transceiver forwards to the wireless communications unit a message corresponding to the status message (see fig.2, wireless connection between item 75 and portable terminal 52).

Regarding claim 9, Greaney further teaches the status message is a call answer (see column 8, lines 41-51 and column 10, lines 45-64), the controller and the WAN transceiver operate to set up a WAN call (see fig.2, and column 4, lines 19-29, see "WAN") and the controller and the wireless LAN transceiver operate to couple the WAN call to the wireless communications unit via the wireless LAN session (see fig.2, and column 4, lines 19-29, see "LAN").

Regarding claim 10, Greaney further teaches the controller together with the local loop interface monitors the local loop for a busy condition (see fig.2, and column 4, lines 19-29, see "WAN") and when the busy condition is detected further determines whether the busy condition results from another wireless LAN session with the wireless communications unit (see fig.2, and column 4, lines 19-29, see "LAN"), and when the busy condition result from the other wireless LAN session (see fig.2, and column 4, lines 19-29, see "LAN"), the controller together with the local loop interface operates to initiate a conference call via the local loop (see column 10, lines 42-44).

Regarding claim 12, Greaney further teaches detecting at a gateway a wireless communications unit (see fig.2, wireless connection between item 75 and portable terminal 52) operable on a wireless local area network (LAN) (see fig.2, and column 4,

lines 19-29, see "LAN"), establishing a connection between the gateway and a wireless wide area network (WAN) via the wireless WAN (see fig.2, and column 4, lines 19-29, see "WAN") and forwarding a message via the wireless WAN, the message including call routing information for the communication unit (column 11, lines 10-14, see "routing").

Regarding claim 13, Greaney further teaches forwarding a registration message via a WAN session to the WAN (see fig.2, and column 4, lines 19-29, see "WAN"), the registration message effecting a call routing update so that calls to the wireless communications unit (see fig.2, wireless connection between item 75 and portable terminal 52) are routed to a local loop that is coupled to the gateway when the wireless communications unit is detected; and the method further comprises receiving an acknowledgement of the registration message via the WAN session (see fig.2, and column 4, lines 19-29, see "WAN").

Regarding claim 14, Greaney further teaches assigning a LAN address to the wireless communications unit (see fig.2, wireless connection between item 75 and portable terminal 52), responsive to the acknowledgment (see fig.2, and column 4, lines 19-29, see "LAN").

Regarding claim 16, Greaney further teaches receiving an incoming call indication via a local loop; establishing a wireless LAN session with the wireless communications unit; forwarding the incoming call indication to and receiving a response from the wireless communications unit via the wireless LAN session, and

when the response is received (see column 8, lines 41-51 and column 10, lines 45-64), answering an incoming call corresponding to the incoming call indication on the local loop and coupling the incoming call to the wireless communications unit via the wireless LAN session (see fig.2, and column 4, lines 19-29, see "LAN").

Regarding claim 17, Greaney further teaches receiving a call request from the wireless communications unit via a wireless LAN session, monitoring a local loop for a busy condition, when the local loop is not busy, initiating a local loop call request corresponding to the call request to a public switched telephone network and receiving one of a call ringing, a call answer and a busy signal (see column 8, lines 41-51 and column 10, lines 45-64), and sending a message via a WAN session indicating the local loop is busy upon initiating the local loop call request and a message indicating the local loop is idle when a call corresponding to the local loop call request has been completed (see fig.2, and column 4, lines 19-29, see "LAN").

Regarding claim 18, Greaney further teaches when the busy condition is detected, initiating a WAN call request corresponding to the call request via the WAN and responsive thereto receiving, from the WAN, a status message corresponding to one of call ringing, a busy signal, and a call answer; and forwarding to the wireless communications unit a message corresponding to the status message (see fig.2, and column 4, lines 19-29, see "LAN").

Regarding claim 19, Greaney further teaches when the status message is a call answer, setting up a WAN call (see column 8, lines 41-51 and column 10, lines 45-64),

Art Unit: 2686

and coupling the WAN call to the wireless communications unit via the wireless LAN session (see fig.2, and column 4, lines 19-29, see "LAN").

Regarding claim 20, Greaney further teaches when the busy condition is detected, determining whether the busy condition results from another wireless LAN session with the wireless communications unit (see column 8, lines 41-51 and column 10, lines 45-64), and when the busy condition results from the other wireless LAN session, initiating a conference call via the local loop (see fig.2, and column 4, lines 19-29, see "LAN").

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greaney et al (US 5,796,729) in view of Stanfield (US 6,856,598).

Regarding claims 4 and 15, Greaney teaches the WAN transceiver and the controller operate: to send a message via a WAN session to the WAN (see fig.2, and column 4, lines 19-29, see "WAN").

Greaney does not specifically disclose sending a deregistration message, the deregistration message effecting a call routing update so that calls to the wireless communications unit are not routed to the local loop when the association is no longer available; and to receive an acknowledgement of the deregistration message via the session.

Stanfield teaches sending a deregistration message, the deregistration message effecting a call routing update so that calls to the wireless communications unit are not routed to the local loop when the association is no longer available, and to receive an acknowledgement of the deregistration message via the session (see column 1, lines 10-29 and see column 21, lines 22-25).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Stanfield into the system of Greaney in order to route the communications via each selected communications control carries in accordance with the processed communication control signals.

7. Claims 11 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greaney et al (US 5,796,729) in view of Schuster et al (US 6,650,901).

Regarding claims 11 and 21, Greaney teaches the WAN transceiver is operable on one of packet data WAN, a 3G WAN, a UMTS WAN, and a broadband WAN (see fig.2, and column 4, lines 19-29, see "LAN").

Greaney does not specifically disclose the LAN transceiver is operable on one of an IEEE 802.11 network and a HiperLan network.

Schuster teaches the LAN transceiver is operable on one of an IEEE 802.11 network and a HiperLan network (see column 5, lines 7-11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Schuster into the system of Greaney in order to provide emergency dispatch services in a data network telephony system (see Schuster, Abstract).

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Younis (US 6,775,563) teaches method and system restricting mobile in a wireless local loop.
- b. Chung (US 6,810,025) teaches DTMF transmission structure of W-CDMA WLL system.
- c. Lee (US 6,714,522) teaches wireless local loop system using CDMA method.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi H. Ly whose telephone number is (571) 272-7911. The examiner can normally be reached on 8:30 am-5:30 pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nghi H. Ly

*(Signature)*  
08/25/05

*Marsha D. Banks-Harold*

MARSHA D. BANKS-HAROLD  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600